

Annual Conference 2018

27th - 29th November
Birmingham

PROGRAMME SESSION SUMMARIES

Tuesday 27th November

PEL Holders' Forum

The ASRU Leadership team will provide an update of any recent changes within the Home Office and provide an overview on subject areas such as Brexit, ASPeL, regulation, modernisation, consistency, responsiveness and compliance. The afternoon session will include a series of guest presentations covering a variety of topics including an update on security risks faced by Establishments in the UK, the work of the Animal in Science Committee and promoting the value of the AWERB Hub initiative. The PEL Holders' forum will close with the ever popular "Ask the Home Office Inspector" question and answer session. Delegates are invited to submit their questions (which will be anonymised), in advance to info@lasa.co.uk.

3Rs, sponsored by AS-ET

The LASA 3Rs section conveners have invited submissions for spoken presentations on any aspect of the 3Rs (Replacement, Reduction and Refinement). This session will provide an opportunity for all research scientists and technicians, including those recently qualified, to present on new advances that are supported by scientific data. LASA is grateful for the continued support from the Animals in Science Education Trust (AS-ET) who sponsor the award for the best 3Rs young presenter.

FELASA update

To help celebrate FELASA's 40th Anniversary, come and hear all FELASA's achievements over the past 40 years and beyond i.e. update on their future plans, liaison bodies and working groups

Inaugural Keynote speaker

Dorothy V. M. Bishop - Professor of Developmental Neuropsychology, University of Oxford
Barriers to reproducibility and how to overcome them



Poor reproducibility in biomedical science has hit the headlines in recent years. Rather than documenting the problems, we need now to identify causes and solutions. Causes are multiple, and include use of small samples, flexible analytic pipelines, insufficient transparency about methods and data, and failure to understand statistics. In addition, psychology studies show that scientific reasoning is contrary to our natural ways of thinking, and we need to overcome cognitive biases. The problems are not, however, solely due to researchers. The incentive structures that arise from the procedures adopted by institutions, funders and publishers all conspire to discourage slow and careful science in favour of haste and hype. On the positive side, funders in particular are concerned not to waste their investments in science, and are already adopting new practices that should encourage scientists to work reproducibly without needing to fear this will damage their careers.

Dorothy Bishop is a psychologist based at the University of Oxford, where she heads a programme of research funded by the European Research Council. She is a supernumerary fellow of St John's College Oxford, a Fellow of the Royal Society, Fellow of the British Academy and Fellow of the Academy of Medical Sciences. Her main research interests are in the nature and causes of developmental language difficulties, with a particular focus on psycholinguistics, neurobiology and genetics. Her book *Uncommon Understanding* won the British Psychological Society's annual award in 1999, and she has published widely on children's language disorders. In 2015 Dorothy chaired a

symposium on Reproducibility in Biomedical Science organised by the Academy of Medical Sciences, Wellcome Trust, MRC, and BBSRC. She has a popular blog, Bishopblog, which features posts on a wide range of topics, including those relevant to research reproducibility. She is also on Twitter as @deevybee.

Trade workshops and Presentations

LASA is delighted that many of our Trade partners at the annual conference are running workshops and presentations this year. Topics for the day include:

- Strategies to Minimize Genetic Drift and Maximize Experimental Reproducibility in Mouse Research by Charles River
- Does Relative Humidity Affect Reproducibility of Research? By Scanbur
- Mind the Gap! An overview of the problems we face in delivering a comprehensive health monitoring service and how we can try to overcome the gaps in knowledge, by Surrey Diagnostic Laboratories

Wednesday 28th November

LAVA

Anaesthesia - but not necessarily as you know it!

The LAVA session at this year's LASA conference is going to revolve around anaesthesia. We hope to present to our audience information and experiences about anaesthesia in a variety of different species and scenarios. We hope that this will provide an insight into the exciting and varied world of research anaesthesia.

LARN

A look on the large size - the Large Animal Research Network (LARN)

Established four years ago, the Large Animal Research network (LARN) provides support and information to those who use large animals in biomedical, veterinary and/or agricultural research. In 2017, LARN was incorporated into LASA and this year's annual meeting will include a diverse range of presentations from speakers with a range of backgrounds and skills relating to large animals.

Presentations will include:

- an overview and update on the FELASA Working Group which aims to formulate farm animal health screening, housing and procurement considerations including a review of current FELASA documents
- the pig influenza model
- the pros and cons of large animals in translational trauma research

Education, Training and Ethics (ETES): Integrity

When does sloppy experimental design become fraud? Should we be concerned with the level of retraction in high impact factor journals? And importantly what motivations and pressures are at play? The session, organised by the Education, Training and Ethics committee of LASA, will tackle Integrity in the context of Laboratory Animal Sciences. An understanding of the motivations and pressures at play, and their consequences should help us all to do a better job

Animal Science: Old guys rule!

In this series of presentations we will be looking at the expanding field of research into aging and the importance of elderly animal models. Across many different topics the use of older animals is now a critical factor which brings with it inherent problems. We will be highlighting the exciting research in this field and looking at the welfare problems that can arise.

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- The digital revolution: a home cage solutions to maximise your science and animal welfare by Tecniplast UK and Italy
- Keeping research on track with colony management tools by Envigo
- How to turn your enrichment concepts into commercially available products and why you should do it - The Janet Wood Innovation Award by Datesand
- Everything You Always Wanted to Know About Health Monitoring - But Were Afraid To Ask by IDEXX Laboratories
- Why Cage Automation for the Cage Wash Area? By Tecniplast UK and IWT Italy.

Thursday 29th November

Care and Welfare: Hand in Glove: the inextricable link between good science and improved welfare

This session will describe how refining experimental procedures and techniques to improve scientific outcome can also minimise cumulative severity and improve the welfare of animals on procedure. A wide range of procedural techniques will be discussed, including surgery, imaging and identification.

The times they are a changing! Animal welfare and changing opinions throughout history

This session brings together expert speakers with links to the [Veterinary History Society](#) and the [Animal Research Nexus Project](#) to discuss how relationships, attitudes and welfare to farm animals, companion animals (with a focus on pedigree dogs) and laboratory animals have changed over the years. There is also a guest speaker from the Royal Army Veterinary Corps (RAVC) to provide an overview of the role of animals in various war campaigns and details of how the RAVC has cared for them throughout history.

Closing Keynote speaker

Professor Sian Harding Interim Head of the National Heart and Lung Institute
Stem cells and heart function - how to repair a broken heart?



What becomes of the broken hearted? Grief and heartbreak can be terrible, but does a 'broken heart' actually hurt our hearts? What can we do when we damage our heart from a heart attack? Join us for a fascinating look at how researchers learn more about the human heart and how we might be able to mend a broken one.

Professor Sian Harding is the interim Head of the National Heart and Lung Institute, Imperial College London and also the Head of the BHF Cardiovascular Regenerative Medicine Centre, Institute Lead for Women for Athena SWAN with NHLI, and the Cardiovascular theme lead for the NIHR Biomedical Research Centre. She obtained her PhD in Pharmacology from King's College, London, and since then the primary focus of her work has been cardiomyocyte function in the failing heart. The BHF Cardiovascular Regenerative Medicine Centre is making engineered heart tissue and pluripotent stem cells cardiomyocytes, to actually replace the damaged muscle and return the heart to the state it was in before the damage occurred. Further details about Sian can be found here: <https://www.imperial.ac.uk/news/186374/meet-sian-harding-interim-head-national/>

Institute of Animal Technology Workshop: Adverse effects, humane endpoints and Animal Welfare

This interactive session will focus on the consideration of adverse effects, humane endpoints and animal welfare when drafting PPL applications. With the assistance of experienced NACWO's and

NVS input, this workshop aims to develop best practice to minimise the effect of an experiment on research animals through discussions, presentations and group work.

A mini-pint of science: Making science exciting!

Pint of Science is a non-profit organisation that brings some of the most brilliant scientists to local pubs to discuss their latest research and findings with the general public. This forum provides the general public a chance to meet the people responsible for the future of science (and have a pint with them). We are pleased that four presenters from the pint of science festival will be coming to present their work, although there will be no “pints” available during the session, there will be soft refreshments and plenty of time to find out more about their exciting work.

The Zebrafish Health and Welfare Glossary: A workshop on the standardisation of welfare terminology

The Zebrafish Health and Welfare Glossary initiative represents a vital contribution to the development of husbandry and welfare infrastructures that support the growth and diversification of uses of this important model organism. This workshop will present the Glossary to community stakeholders, explain its importance, and show how it works. The workshop also will provide an opportunity to reflect upon the Glossary's origins, development and prospects by placing it within the context of similar standardisation initiatives in other species, and the history of standardisation in laboratory animal husbandry and welfare more widely. This workshop will be of relevance to anyone who works with zebrafish, including technicians, veterinary officers, facility managers and researchers, as well as regulators and animal welfare charities

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- Optimal breeding of zebrafish: there are multiple approaches that can be considered, but how do you get the best out of your fish?
By Tecniplast UK
- The real key of the experiment success: Genetics Stability over time
By Janvier Labs